WHAT IS CLAIMED IS:

1. A polymerizable composition comprising:

(A) a compound including a polymerizable unsaturated group; and

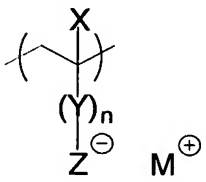
(B) a macromolecular compound including, at a side chain thereof, a structure represented by the following general formula (I):

General formula (I)

$$Z^{-}M^{+}$$

wherein Z^{-} represents $COCOO^{-}$, COO^{-}, SO_3^{-} or $SO_2\text{-}N^{-}\text{-}R$ where R represents a monovalent organic group and M^{+} represents an onium cation.

2. A polymerizable composition according to claim 1, wherein the (B) macromolecular compound including, at a side chain thereof, the structure represented by general formula (I) has a structural unit represented by the following general formula (II):



(II)

wherein X represents a hydrogen atom, a monovalent organic group, a hydroxyl group, a urethane group, a urea group, a halogen atom, an amino group, an amide group, a sulfonyl group or a sulfonate group, Y represents a divalent organic connecting

group, n denotes 0 or 1, Z^- represents $COCOO^-$, COO^-, SO_3^- or $SO_2\text{-}N^-\text{-}R$ where R represents a monovalent organic group and M^+ is an onium cation.

3. A polymerizable composition according to claim 1, wherein the macromolecular compound (B) comprises a compound for generating radicals by the action of light or heat and has a weight average molecular weight (Mw) of at least 1,000 and no more than 100,000.

4. A polymerizable composition according to claim 1, wherein Z^- of the macromolecular compound (B) represents $COCOO^-$.

5. A polymerizable composition according to claim 1, wherein M^+ of the macromolecular compound (B) is selected from sulfonium, iodonium, diazonium and azinium.

6. A polymerizable composition according to claim 1, wherein the amount of the component (B) in the polymerizable composition is in a range of 0.5 to 50% by mass as a solid.

7. A polymerizable composition according to any of claims 1 to 6, further comprising (C) a compound having a maximum absorption wavelength at 700 to 1200 nm.

8. A planographic printing plate precursor comprising:

a support; and

a recording layer disposed on the support,

wherein the recording layer includes the polymerizable composition of any of claims 1 to 7.

9. A planographic printing plate precursor comprising:

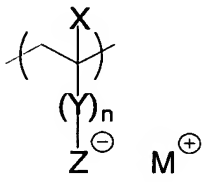
a support; and

a recording layer disposed on the support;

whrerein the recording layer includes a polymerizable composition comprising:

(A) a compound including a polymerizable unsaturated group; and

(B) a macromolecular compound including, at a side chain thereof, a structure represented by the following general formula (II):



(II)

wherein X represents a hydrogen atom, a monovalent organic group, a hydroxyl group, a urethane group, a urea group, a halogen atom, an amino group, an amide group, a sulfonyl group or a sulfonate group, Y represents a divalent organic connecting group, n denotes 0 or 1, Z^- represents $COCOO^-$, COO^-, SO_3^- or $SO_2\text{-}N^-\text{-}R$ where R represents a monovalent organic group and M^+ represents an onium cation.

10. A planographic printing plate precursor according to claim 9, wherein the polymerizable composition further comprises (C) a compound having a maximum absorption wavelength at 700 to 1200 nm.

11. A polymerizable composition comprising:

(1) a compound for generating a radical using light or heat;

(2) a polymerizable compound; and

(3) an infrared absorber, wherein;

the molecular weight of the compound (1) generating a radical is at least 1,000 and no more than 50,000.

12. A polymerizable composition according to claim 11, wherein the radical generating compound (1) comprises a macromolecular compound, which includes, at a side chain thereof, a structure represented by the following general formula (I),

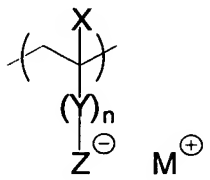
$Z^{-}M^{+}$

General formula (I)

wherein Z^{-} represents $COCOO^{-}$, COO^{-}, SO_3^{-} or $SO_2\text{-}N^{-}\text{-}R$ where R represents a monovalent organic group and M^{+} represents an onium cation.

13. A polymerizable composition according to claim 12, wherein the macromolecular compound, which includes a structure represented by the general formula (I), has a structural unit

represented by the following general formula (II):



(II)

wherein X represents a hydrogen atom, a monovalent organic group, a hydroxyl group, a urethane group, a urea group, a halogen atom, an amino group, an amide group, a sulfonyl group or a sulfonate group, Y represents a divalent organic connecting group, n denotes 0 or 1, Z^- represents $COCOO^-$, COO^-, SO_3^- or $SO_2\text{-}N^-\text{-}R$ where R represents a monovalent organic group and M^+ represents an onium cation.

14. A polymerizable composition according to claim 12, wherein Z^- of the macromolecular compound (B) represents $COCOO^-$.

15. A polymerizable composition according to claim 12, wherein M^+ of the macromolecular compound is selected from sulfonium, iodonium, diazonium and azinium.

16. A polymerizable composition according to claim 11, wherein the amount of the component (I) in the polymerizable composition is in a range of 0.5 to 50% by mass as a solid.

17. A planographic printing plate precursor comprising:

a support; and

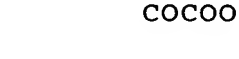
a recording layer disposed on the support, wherein;

the recording layer includes the polymerizable composition of claim 11.

18. A planographic printing plate precursor according to claim 17, wherein the polymerizable composition further includes (C) a compound having a maximum absorption wavelength at 700 to 1200 nm.

19. A macromolecular compound including, at a side chain thereof, a structure represented by the following general formula (III):

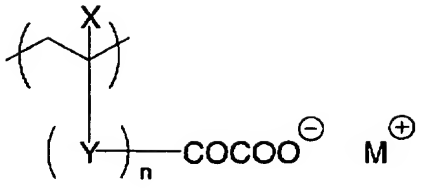
General formula (III)



wherein M^+ represents an onium cation selected from sulfonium, iodonium, diazonium and azinium.

20. A macromolecular compound according to claim 19, wherein the macromolecular compound including, at a side chain thereof, a structure represented by the general formula (III) comprises a structural unit represented by the following general formula (IV).

General formula (IV)



wherein X represents a hydrogen atom, a monovalent organic group, a hydroxyl group, a urethane group, a urea group, a halogen atom, an amino group, an amide group, a sulfonyl group or a sulfonate group, Y represents a divalent organic connecting group, n denotes 0 or 1 and M^+ represents an onium cation selected from sulfonium, iodonium, diazonium and azinium.